

MEN AND BOOKS

English Token Coins and Medicine

GERALD D. HART, M.D., F.R.C.P.[C], F.A.C.P., F.R.N.S.,* *Toronto*

TOKENS have been used throughout history as a substitute for money. In Canada we are familiar with bus and subway tokens and in France they are required for public telephones. Storer¹ in his monumental book "Medicina in Nummis" describes the earliest medical use of tokens; these were numbered pieces used to gain admission to the houses of prostitution in ancient Rome (the medical application is somewhat cryptic). Fig. 1 shows a token for entrance to the botanical gardens issued to 18th-century Amsterdam medical students.

nia on the reverse (a symbol first depicted on Roman coins of Hadrian and which remains today on the British penny). During the next 150 years, the supply of official small coinage frequently stopped and immediately token coins reappeared. In the latter part of the 18th century, steam-driven presses began mass-producing token coins. This not only served the increasing commercial needs of the Industrial Revolution but also favoured the development of advertising tokens, commemorative tokens and tokens for collectors.



Fig. 1.—Token giving medical students free entry to the Botanical Gardens, Amsterdam, 1747.

In the past there were many periods when official coins of low value were scarce and local merchants supplied their own small change. Tokens have been used for advertising and propaganda; some have been made just for token collectors. In this numismatic field, there are many coins of medical interest and the English Token Coins are readily available.

In Britain, between 1648 and 1820 there were recurring shortages of low-denomination coins needed for the small change of everyday life. In order to solve this problem, local merchants supplied their own money. These pieces are known as Genuine Trade Tokens (GTT).² The first era of the GTT began during the Cromwell Commonwealth (1648) and ended during the reign of Charles II (1679). During this epoch, 12,722 different varieties of farthings, halfpennies and pennies were produced by various trades, including the apothecaries. In 1672 the regal copper coinage of Charles II appeared. These coins portrayed Britan-

In 1797 regal coinage returned with the famous cartwheel pennies (Fig. 2). These contained a full weight of copper which at the time was valued at £105 a ton. Twenty years later the cost of copper had risen to £200 a ton and private individuals began melting down the coinage for profit. Once again there was a shortage of official coins and a return of token currency. An Act of Parliament in



Fig. 2.—Cartwheel penny, George III, 1797.

*Department of Medicine, Toronto East General Hospital, Coxwell and Sammon Avenues, Toronto 6, Ontario.

1817 declared tokens illegal. In the following years, advertising tokens were still produced and in the Colonies tokens continued to be used as legal tender.

17TH CENTURY APOTHECARY TOKENS

At the present time there are 135 known varieties of apothecary tokens.³ The obverse bears the issuer's name and his town of business, and many are inscribed with apothecary or its variants—apothc, apothycary, apotecar, apothec, apoth, apothcraye, apothecarie, apothecarie, pothery and pothery. The reverse usually depicts a suitable symbol which would aid the illiterate to identify the street sign of the issuer's shop. The most frequent apothecary symbol was the Apothecary Arms of London which portrayed Apollo (Father of Asclepius who had medicinal duties before Asclepius appeared), with a bow and arrow, standing astride the slain dragon of disease (Fig. 3). The use of this symbol by apothecaries outside London probably indicated that the proprietor served his apprenticeship with the London guild. A mortar or a mortar and pestle also appear on apothecary tokens; however, this symbol was also used by grocers (before 1617 both the London grocers and the apothecaries belonged to the same guild and evidence of this link can be found on some provincial tokens).



Fig. 3.—Apothecary coat of arms, Apollo astride the slain dragon of disease, Liverpool, 1666.

Some apothecaries used the motto of the Society of Apothecaries—*obiferque per orbem dicor* (I am called help-giver throughout the world), or the Society's crest—a rhinoceros (referring to the medicinal properties of rhinoceros horn). Occasionally a bunch of lilies was used in association with apothecaries—did this indicate the floral source of therapeutic agents? A few apothecaries used a family coat of arms in place of a pharmaceutical symbol (Fig. 4).

Although the apothecary tokens span the period of the Great Plague, they reveal little about it. One



Fig. 4.—Beehive, family coat of arms, William Rowe, Apothecary, Newport, Cornwall, 1666.

can speculate on the fate of the handlers of the token shown in Fig. 5. During the epidemic, money



Fig. 5.—Apothecary token, Doncaster, 1665.

was suspected as a source of infection and tradesmen provided bowls of water or vinegar for purification of coins.⁴ Unfortunately, as yet, there is no token ascribed to Boghurst, the apothecary of St. Giles in the Fields, who escaped the plague in spite of heroically treating up to 40 victims a day.



Fig. 6.—Apothecary token, 1666.

The year 1666 shown on the coin in Fig. 6 indicates the year when the hall of the Apothecaries Company was destroyed by the Great Fire. It was rebuilt in 1668 and was slightly damaged during the blitz of 1940. The list of apothecary tokens is not complete; a geographic study of them reveals that there are no issues from many important market towns, such as Chelmsford in Essex.

During this period the barber-surgeons also produced tokens but in far smaller numbers than the apothecaries. It is of interest that physicians did not produce tokens, and this probably indicates that the fee structure was based on silver, and pennies, halfpennies or farthings were not needed.

18TH CENTURY TOKENS

During the 18th century there was an increase in commerce and an improvement in coin production. Many tokens of medical interest appeared, and their artistic style is frequently superior to our current coinage. The best-known patent medicine advertising tokens of the period included those of Burchell, Ching, Swainson and Hannay.

ANODYNE NECKLACES AND SUGAR PLUMS

Basil Burchell of 79 Long Acre (two doors from Drury Lane), London, produced advertising tokens during the years 1790 to 1800. This token showed him to be the sole proprietor of the anodyne necklace for children cutting teeth and sole proprietor



Fig. 7.—Token of Basil Burchell, sole proprietor of anodyne necklace for children cutting teeth and the famous sugar plums for worms, London, 1790.

of the famous sugar plums for worms (Fig. 7). The advertising material of the day reveals that these necklaces were supplied to the King for the Royal children, and the proprietor cautioned the public against imitations made by ignorant quacks.⁵ It is of interest that the proprietor himself was a jeweller and goldsmith and also sold "the greatest variety of gold and silver locket for the necklaces and on the side had an assortment of silver and gilt corals (teething rings), silver pap boats (feeding bottles), pap spoons and clasps". The Royal approval and the luxury range of accessories suggested that he catered to the original carriage trade. His shop sign was unique among the famous trade signs of 18th century London. It showed the necklace surmounted centre by a matronly figure and circumscribed anodyne necklace. This business enterprise had the same pattern as those in London today. His head office was in the West End, viz. Drury Lane, but he also had a branch in the City where the necklaces could also be bought "by appointment from Mrs. Rundall's, late Tutt's Medicine Shop, exactly facing Mr. Hazard's lottery Office at the Royal Exchange". The necklaces sold for 5/5d. and possibly consisted of beads of peony wood which could be sucked by teething children.

The famous sugar plums for worms were "the best Physic in the world for children and all persons who are adverse to quantities of apothecaries draughts, boluses and pills which are generally difficult to take, disagreeable in taste and unfriendly to the stomach".⁵ The properties of this medicine were truly astonishing: "If three doses of it are taken twice a year, viz. at spring and fall, either by grown persons or children, they entirely free the body from foul humours, purify the blood, completely cleanse the stomach, bowels and glands producing a prolific state of health." They were also of value in the following conditions "which so very common and too frequently baffles the skill of the most eminent physicians: agues, fevers, headache, colic, grippe, rheumatism, deafness, anorexia, coughs, colds, whooping coughs, smallpox, measles, asthma, dyspnea". The contents of the antihelminth are not known but almost certainly contained a strong laxative in a sweet palatable preparation. They sold for 2/8d. for three dozen; 1/½d. per dozen and to merchants, country dealers and chari-

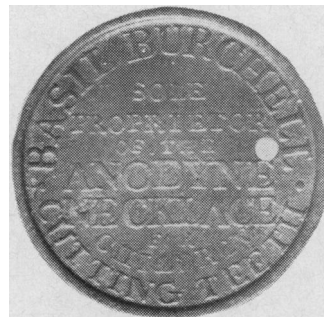


Fig. 8.—Pierced Burchell token used as a talisman.

table persons to give away (social welfare?) 10/- per gross. Many of the tokens were pierced in order to be worn around the neck (Fig. 8).

VELNOR'S VEGETABLE SYRUP

The Swainson token advertises a nostrum for venereal disease but also useful for gout, rheumatism, palsy, apoplexy, impotency, barrenness, scrofula, consumption and scurvy. The reverse shows Hygeia dropping herbs into a still from which Velnor's Vegetable Syrup is prepared (Fig. 9).



Fig. 9.—Swainson token advertising Velnor's Vegetable Syrup; this shows Hygeia preparing the nostrum.

John Burrows, Doctor of Physic from the Parish of St. James Westminster, patented the syrup in 1772, but the method of preparation is somewhat vague. The contents included purging plants, *sal tarturi*, antivenereal and antiscorbutic plants, juice of dandelion and whites of eggs. In 1781, a competitive Velno Vegetable Syrup appeared produced by P. Mercier, M.D. and J. Swainson. The latter, according to the scornful advertisements of Burrows, "*Ne sutor ultra crepidam*"—"let the cobbler stick to his last", was a draper in the employ of a medicinemonger.⁶

SIR SAMUEL HANNAY

The popularity of venereal therapy is shown by the token of Samuel Hannay, who proclaimed that for 10/6d. one could purchase the only infallible preventive of a certain disease. This token portrays a rhinoceros, symbolic of 17th-century apothecaries and used in their crest, and also shows the medicinal use of the horn and is possibly associated with the symbol of cuckoldry (Fig. 10).



Fig. 10.—The token of Sir Samuel Hannay advertising the only infallible preventive of a certain disease (venereal).

Sir Samuel made his preventive discovery in 1750 and established a pharmaceutical business in 1762. In 1844 the descendant company published an almanac listing the patent medicines and perfumes sold by the company, including many items for the skin and scalp.

Sir Samuel was the head of a distinguished Scottish family, the Hannays of Kirkdale, who had held land in Galloway since 1530. In addition to his druggist business, he had 500 acres of land in Florida and was provost marshal of East and West Florida, and in 1783 inherited a Nova Scotia baronetcy which had been granted to an ancestor by Charles I. In his life he squandered vast sums of money and died in 1790, leaving debts of £200,000.⁷

CHING'S TOKEN

This token proclaims Ching's Patent Worm Lozenges as the best in the world and shows a well-dressed youth of the times (Fig. 11). The Royal coat of arms appears on the reverse (? symbolic of patriotism or of "By Appointment to the Royal Family") and around it the words "By Every Principle Medicine Vendor in the Kingdom". The lozenges contained jallap and mercurial purgatives.

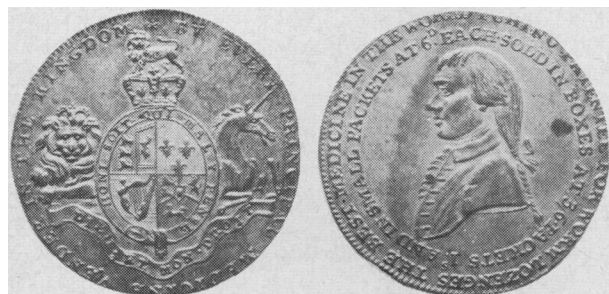


Fig. 11.—Ching's, the best medicine in the world (worms), showing a well-dressed youth of the times and the Royal coat of arms.

THE ILLNESS OF GEORGE III

The reign of George III was interrupted by the monarch's five attacks of serious illness. The second episode occurred between October 1788 and February 1789 and created grave concern among the people and parliament. The king became psy-



Fig. 12.—Token of gratitude for the recovery of George III from his second attack of porphyria, 1789.

chotic and a special parliamentary committee interrogated his physicians about his competency to rule and his prognosis. In January, the House of Commons passed a Bill giving a regency to the Prince of Wales and on February 12, while the Bill was being considered by the House of Lords, the king unexpectedly began to recover. On February 26 "the cessation" of his illness was announced, and the king resumed personal exercise of his royal authority on March 10. On April 23, services were held for "delivery of our most Gracious Sovereign from the severe illness with which he hath been afflicted". The national rejoicing is reflected in the token of 1789 (Fig. 12) which bears the inscription "Lost to Britannia's hope but to her prayers restored 1789". The portrait of the king shows him in health, but records state that he was emaciated and enfeebled. However, he regained complete health for the next 12 years. This is supported numismatically by the similarity of the pre-illness portrait shown on the token and the regal portrait on the cartwheel penny of 1797 (Fig. 2). Coins of his reign (1760-1820) show at least seven portrait styles beginning as a youthful head and then portraying maturity and old age.

Macalpine and Hunter⁸ recently published a classical retrospective study of the royal illness, using records preserved in Royal Archives, Queen's Council papers, Crown-copyright material in the Public Record Office and reports of attending physicians (the Willises, Ballie, Heberden, Baker and Halford). From these data the authors established the diagnosis of porphyria.

TOKENS FOR SALE TO COLLECTORS

Token collecting was popular in the late 18th century and special tokens were made for this purpose. Waters⁹ comments that there were many more coin dealers in London at that time than there are at the present time. The special tokens were excellent pieces of art portraying London gates, bridges, churches, hospitals and other buildings. Fig. 13 shows Aldgate, which was pulled down in 1766; its location is marked today by a blue city plaque at 88 Aldgate High Street. This is a sentimental scene to those interested in public health because the Aldgate pump is still located a few hundred feet inside the gate. Included in the

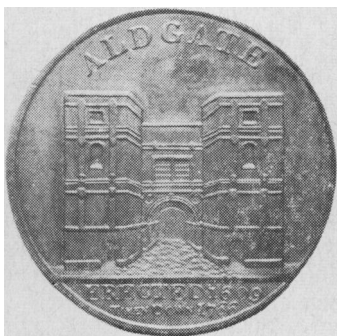


Fig. 13.—Collector's token, Aldgate site of the terminal of the water conduit from Hackney.

London scenes portrayed on collectors' tokens were many hospitals. Fig. 14 shows Guy's Hospital in 1722 and the Middlesex Hospital in 1755. These and other London hospital tokens will be reviewed in a subsequent paper.



Fig. 14.—Collection tokens showing the Middlesex Hospital in 1755 and Guy's Hospital in 1722.

HOSPITALS AND GENUINE TRADE TOKENS

Following the dissolution of the monasteries by Henry the Eighth, local municipalities inherited the responsibility of providing refuge for the cold, hungry and sick, and many municipal tokens of the 17th century bore the inscription "the Porre's half-penny—to be changed by the Overseers for the Poor". In 1817 an Act of Parliament declared tokens illegal but express allowances were made so that the penny tokens of the Birmingham workhouse and the Sheffield overseers of the poor would remain current until 1820 and 1823.

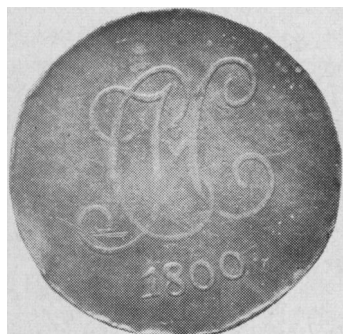


Fig. 15.—Commercial token of Christ's Hospital School (Bluecoat School), 1800.

Christ's Hospital produced $\frac{1}{2}$, 1 and 6d. tokens (Fig. 15). This institution was founded by Edward VI in 1557 on the site of the Grey Friars monastery as a hospital for poor fatherless children and foundlings.¹⁰ It became known as the Bluecoat School which finally moved to Horsham, Sussex, in 1902. Part of the site, however, has maintained medical continuity because, in 1907, St. Bartholomew's Hospital built an extension there.

OTHER 18TH CENTURY TOKENS OF MEDICAL INTEREST

The west front of the new Pump Room at Bath is well portrayed in the token of Heath the iron-monger in 1795. This same merchant issued tokens showing Bladud, the mythical founder of Bath, and inscribed "Success to the Bath Waters" (Fig. 16). The casualties of war are reflected in a Chelsea



Fig. 16.—Trade token from Bath showing the Pump Room and Bladud, the mythical founder of Bath.

token (Fig. 17) which portrays a sailor with a crude wooden leg petitioning Britannia for help; the reverse of this token is inscribed, "The Support of our Endeavours". Chelsea still retains these associations with the past; the Chelsea Pensioners Hospital, which was severely damaged in World War II, has been completely restored.



Fig. 17.—Chelsea token showing a youthful sailor with a wooden leg.

The morbid curiosity of mankind toward their less fortunate fellows is not limited to the freak shows of today. The token coin of 1795 advertising the curiosity house of City Road (Fig. 18) shows Sir Jeffrey Dunstan, the Mayor of Garratt, a dwarf with genu valgus. Garratt Lane was a slum thoroughfare connecting Wandsworth with Toot-

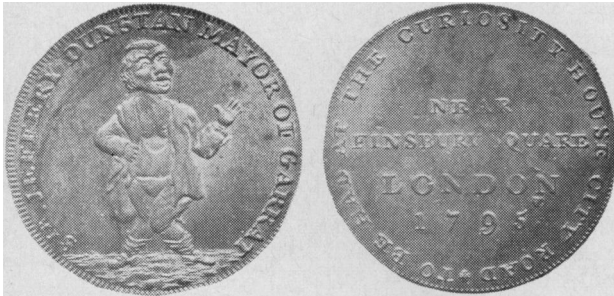


Fig. 18.—Sir Jeffrey Dunstan, mock Mayor of Garratt and a dwarf with *genu valgus*, to be seen at the Curiosity House.

ing, and in the 18th century the South London pubs sponsored a burlesque election of a comic mayor. Sir Jeffrey was a witty panhandler who avoided prosecution by assuming the trade of buying old wigs.¹⁰

19TH CENTURY ADVERTISING TOKENS

In the mid-19th century, Professor Holloway's Pills and Ointment enjoyed an international market. These were advertised on his tokens (Fig. 19) and in newspapers throughout the world, including Ontario.



Fig. 19.—Professor Holloway and Hygeia advertising Holloway's pills and ointment.

His tokens were not only used for advertising but were also an additional source of profit; Holloway sold them for export to colonial markets which were short of government copper coinage. In 1857 the copper penny and halfpenny were introduced into New Zealand and were used as legal tender for 20 years. If at that time Canada had still been in the sterling area, we would also have been inundated with these fine pieces of currency. It is appropriate that a most detailed account of Professor Holloway has been prepared by Dr. L. Gluckman, the Vice-President of the Royal Numismatic Society of New Zealand.¹¹ The halfpenny and penny coins show a charming portrait of Holloway on the obverse and a classical Hygeia with serpent on the reverse. Holloway, a self-styled professor without medical or scientific training, was a shrewd businessman who exploited the sick but understood the psychology of the art of medicine. In his later years he became a philanthrope and dedicated much of his fortune to the benefit of

mankind. In 1865 he initiated a project to build a model sanatorium for potentially curable mental patients. This 600-room, 400-bed structure was formally opened by the Prince of Wales (later King Edward VII) in 1885. In 1886 Queen Victoria opened Holloway College for Women with 1000 rooms and a capacity for 250 students. This college was non-denominational and richly endowed with Holloway scholarships and art. Today the Royal Holloway College is a school of the University of London.

In his early years Holloway succeeded in introducing Albinale's Ointment into St. Thomas's Hospital. He obtained testimonials from the hospital staff and discovered the potential in the patent medicine field. In 1838 advertisements for Holloway's Family Ointment appeared, supported by testimonials from Herbert Mayo, senior surgeon to the Middlesex Hospital.

The Canadian advertisement for Holloway's pills, like those in Britain, New Zealand, Australia, China, Egypt, and India, is prefaced by "Cure for all and the Greatest Wonder of Modern Times". The pills purify the blood, correct all disorders of the liver, stomach, kidneys and bowels and are invaluable to all complaints incidental to females. The pills contain 36.15% powdered ginger, 36.15% compound of aloes, 12% powdered jallap, 12% cambogia and 3.7% hard soap. The ginger causes belching while the aloes and the jallap stimulate the bowels. Some of the aloes might be excreted in the urine, rendering it violet if alkaline, or brownish yellow if acid—thereby substantiating to the sufferer the benefit to his kidneys. The aloes might stimulate uterine contraction and bring about abortion. The cambogia was a vegetable laxative.

The ointment was billed as "the only reliable remedy for bad legs, old wounds, for sores, ulcers and also for bronchitis, diphtheria, coughs, colds, rheumatism and for all skin disease it has no equal". The ointment was prepared with cocoa butter, lanolin and liquid paraffin. It also contained turbinth or turpentine, which was an old-fashioned remedy for coughs, colds and kidney ailments when taken internally and had a rubefacient and antiseptic action when applied externally. The rectified *oleum picis* has an action like that of coal tar and the phenol was antipruritic. It also contained cataceum of yellow beeswax, which is a constituent of cold creams, and oil of theobromine, which helped keep the ointment in place and protect the sore.

This concoction represented a broad-spectrum ointment. If Dr. Holloway had compounded it today, it would probably have contained vitamin E and hydrocortisone too!

The study of tokens is a tangible key to the storehouse of medical history. The English tokens are well but still incompletely catalogued. In Canada, the field is even less well documented. Dr. Stuart Kenning of Victoria, B.C., President of the Victoria Numismatic Society, and Dr. Marvin Kay, Vice-President of the Toronto Coin Club, are also working on the subject, and we would welcome correspondence from readers who have Canadian tokens (Fig. 20) with medical or pharmacological reference.

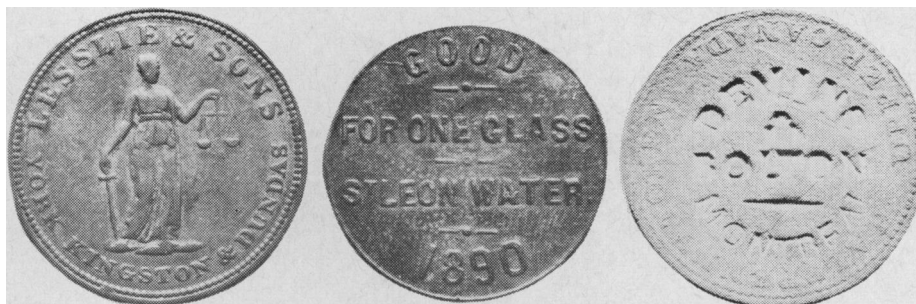


Fig. 20.—Canadian medical and pharmacy tokens.

The author is indebted to Mr. Peter Milligan, Department of Medical Photography, Toronto East General Hospital, for preparation of the illustrations and to the Director of the Wellcome Historical Medical Museum and Library, London, England, for supplying references 5 and 6.

REFERENCES

1. STORER, H. R.: *Medicina in nummis; a descriptive list of coins, medals, jetons relating to medicine, surgery and allied sciences*, edited by M. Stover, Wright & Potter, Boston, 1931.
2. SEABY, H. A.: *British copper coins and their values*, part 2, B. A. Seaby Ltd., London, 1961.
3. TREASE, G. E.: *Pharm. J.*, 195: 313, 1965.
4. BELL, W. G.: *The great plague in London in 1665*, W. Clowes & Sons Ltd., London, 1951.
5. Wellcome Historical Medical Library: Copy of an advertisement by Burchell supplied by the Wellcome Library.
6. *Chem. Drug.*, special issue, 106: 848, June 1927.
7. HANNAH, A.: *Seaby's Coin and Medal Bulletin*, 6: 207, 1965.
8. MACALPINE, I. AND HUNTER, R.: *Brit. Med. J.*, 1: 65, 1966.
9. WATERS, A. W.: *Notes on eighteenth century tokens*, B. A. Seaby Ltd., London, 1954.
10. WALFORD, E.: *Old and new London*, Cassell & Co. Ltd., London (circa 1880).
11. GLUCKMAN, L.: *New Zealand Numismatic Journal*, 11: 108, 1964.

PAGES OUT OF THE PAST: FROM THE JOURNAL OF FIFTY YEARS AGO

THE PANCREAS IS SUSPECTED

The structures which should be considered in a discussion of internal secretions are as follows, the suprarenal glands, the pituitary body, the pancreas, the reproductive glands, the thymus gland, the mucosa of the small intestine as well as that of the pyloric region of the stomach, the pineal body and the thyroid system.

The suprarenal bodies, as is also the case with other organs of internal secretion, have more than one function to perform. The medullary substance differs widely from the cortex, both in function, structure and origin. The medulla of the suprarenal is the seat of manufacture of the well-known chemical substance epinephrine or adrenaline. The point of action of this chemical is the end-organ of the terminals of the sympathetic nervous system and is all-important in maintaining the tone of that system. The physiology of the suprarenal cortex is not so clearly understood as that of its medulla. It may have something to do with pigmentation as Addison's disease would seem to indicate. Some observers hold that the cortex regulates the nutrition of the reproductive glands. We have proof, however, that it is essential to life, as experiments on Elasmobranch fishes have shown.

The pituitary gland is composed of three distinct parts, a pars anterior, a pars intermedia, and a pars posterior. Each of these again, it is probable, has a distinct function to perform. The posterior lobe produces a chemical substance, pituitrin, which has found such great service in practice on account of its specific action on the uterine muscular wall. It also is a galactagogue, as has been shown by MacKenzie. The anterior lobe produces a substance of unknown nature which seems to regulate growth of bone. The work of Horsley and Cushing has done much to unfold the secrets of the pituitary body. Hyper-activity of the anterior lobe as is supposed to be frequently the condition in cases of tumour, leads to acromegaly or gigantism. Hypo-activity, on the other hand, may be the underlying cause of certain cases of obesity. There is also a certain relationship between the pituitary and the reproductive glands. The pars intermedia is believed by some to be closely associated with the thyroid gland.

The pancreas as an organ of internal secretion has been in much dispute. The peculiar islets of Langerhans, which are situated in the pancreas, have received various interpre-

tations. That some close relationship between the pancreas and carbohydrate metabolism exists has long been suspected, but the complete failure in all attempts of organ therapy in diabetes mellitus did much to discredit this theory. Very recent work by Cohnheim and Levene has demonstrated the use of the internal secretion of the pancreas in the normal destruction of dextrose within the organism. Unfortunately, when the process becomes disordered pancreas feeding cannot correct the defect.

In dealing with the reproductive glands we must again clearly differentiate between the production of the sexual elements by these glands and the additional important activity, their hormone-elaborating capacity. The function of the hormones manufactured by the gonads has been quite clearly demonstrated. The internal secretion of the gonad becomes effective early in embryonic life and it is to the activity of this substance that the primary sexual characteristics are due. For example, it is impossible to have what might be called a neutral as regards sex. A male castrated early in life becomes quite different as far as sexual characteristics are concerned from a normal male, but yet does not approach in resemblance to a female also castrated at an early age. The hormones which regulate the sexual characters are formed in the case of the male gonad by the interstitial cells of Leydig, while in the female gonad the stroma ovarii are believed to be the seat of their elaboration.

After puberty secondary sexual characteristics make their appearance and they also are due to the activity of the internal secreting mechanism of the gonad. The activity of the female breast, one of the secondary features of sex, is due, it is thought, to the ovarian activity and also growth of the uterus. Ovulation, menstruation and the estrus cycle are again all due to the periodic activity of this organ.

The corpus luteum which develops and attains a considerable size within the ovary, if ovulation has been followed by impregnation and fixation to the uterine wall, also assumes the part of a specific hormone producer. The maintenance of the embryo and later of the fetus on the wall of the uterus is due to the functioning of the corpus luteum.

The swelling of the breasts and their preparation for lactation is probably due to a hormone produced by the fetus itself, although the causation of this has also been ascribed to the corpus luteum.—J. B. Collip, *Canad. Med. Ass. J.*, 6: 1066, 1916.